



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,819	11/19/2003	Richard A. Schumacher	MEMORY-35	3655
23599	7590	09/15/2005	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			DAVIS, ZINNA NORTHINGTON	
		ART UNIT	PAPER NUMBER	
		1625		

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/715,819	SCHUMACHER ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Zinna Northington Davis	1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
  - 2a) This action is **FINAL**.      2b) This action is non-final.
  - 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
- Disposition of Claims**
- 4) Claim(s) 1-85 is/are pending in the application.
    - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
  - 5) Claim(s) \_\_\_\_ is/are allowed.
  - 6) Claim(s) \_\_\_\_ is/are rejected.
  - 7) Claim(s) \_\_\_\_ is/are objected to.
  - 8) Claim(s) 1-85 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ . | 6) <input type="checkbox"/> Other: ____ .                                   |

***Election/Restrictions***

1. Claims 1-85 are pending.
2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-19, 24, 27, 29-56, 60, 64-69 and 85, drawn to a chemical compound and a pharmaceutical composition of formula I.
  - II. Claims 1-22, 24, 29-60, 64-69 and 85, drawn to a chemical compound and a pharmaceutical composition of formula II.
  - III. Claims 1-19, 23-56, 60-63, 69-69 and 85, drawn to a chemical compound and a pharmaceutical composition of formula III.
  - IV. Claims 70-78, drawn to a method for effecting PDE4 enzyme inhibition, enhancing cognition and/or treating psychosis in a patient using a chemical compound of formula I.
  - V. Claims 70-78, drawn to a method for effecting PDE4 enzyme inhibition, enhancing cognition and/or treating psychosis in a patient using a chemical compound of formula II.
  - VI. Claims 70-78, drawn to a method for effecting PDE4 enzyme inhibition, enhancing cognition and/or treating psychosis in a patient using a chemical compound of formula III.
  - VII. Claims 79-80, drawn to a method for treating a patient having a disease involving decreased cAMP levels using a chemical compound of formula I.

- VIII. Claims 79-80, drawn to a method for treating a patient having a disease involving decreased cAMP levels using a chemical compound of formula II.
- IX. Claims 79-80, drawn to a method for treating a patient having a disease involving decreased cAMP levels using a chemical compound of formula III.
- X. Claim 81, drawn to a method for treating a patient suffering from an allergic or inflammatory disease involving using a chemical compound of formula I.
- XI. Claim 81, drawn to a method for treating a patient suffering from an allergic or inflammatory disease involving using a chemical compound of formula II.
- XII. Claim 81, drawn to a method for treating a patient suffering from an allergic or inflammatory disease involving using a chemical compound of formula III.
- XIII. Claims 82-84, drawn to a method for treating a patient suffering from a neurodegeneration resulting from a disease or injury using a chemical compound of formula I.
- XIV. Claims 82-84, drawn to a method for treating a patient suffering from a neurodegeneration resulting from a disease or injury using a chemical compound of formula II.

Art Unit: 1625

XV. Claims 82-84, drawn to a method for treating a patient suffering from a neurodegeneration resulting from a disease or injury using a chemical compound of formula III.

3. Inventions I-XV are related as product claims. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product. For instance, see the claims 70, 79, 81, and 82.

4. This application contains claims directed to the following patentably distinct species of the claimed invention: A, B, D, phenyl, and bicyclic phenyl.

The ring system and radicals within the definition A, B, D, phenyl, and bicyclic phenyl are diverse in scope. A prior art reference, which anticipates one member such as phenyl under 35 U.S.C. 102, would not render obvious another member such as pyridinyl or benzodiazolyl under 35 U.S.C. 103. Accordingly, the ring systems and the radicals are independent and patentably distinct.

5. Applicant is required under 35 U.S.C. § 121 to elect a **single disclosed species** for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. If the preferred group is a method of use, a single disclosed disease state should be elected. Currently, claims 1-85 are generic.

6. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. §1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. §103 of the other invention.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise

include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

9. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Art Unit: 1625

10. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

11. Due to the complexity of the restriction requirement, a written request is made.

12. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

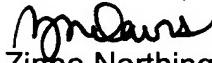
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zinna N. Davis whose telephone number is 571-272-0682. The examiner can normally be reached on M-F.

15. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1625

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Zirma Northington Davis  
Primary Examiner  
Art Unit 1625

znd  
September 11, 2005